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909	7590	08/22/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			TABATABAI, ABOLFAZL	
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MCLEAN, VA 22102			PAPER NUMBER	
			2625	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/761,938

Applicant(s)

SHAMS ET AL.

Examiner

Abolfazl Tabatabai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 76, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1, of U.S. Patent No.6, 731,781. Each of the limitation set forth in the claim of the instant application is defined in the claims of the patent.

For example claim 76, of the current application, compared to claim 1, of the patent No.6,731,781 which, discloses a memory storing a digital image of the array, and a processor for accessing each of the plurality of sub-grids in the digital image, detecting in each of sub-grids a center-representing pixel of the signal of a chemical material and approximate radius of the signal, segmenting the signal, and calculating the characterizing measure for the segmented signal (column 21, lines 13-24).

Claim 76, would be allowable if a terminal disclaimer is timely filed to overcome the obviousness-type double-patenting.

### **Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 17-21, 35-39 and 53-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Nandabalan et al (U S 6,057,101).

Regarding claim 1, Nandabalan discloses a system for evaluating a signal characterizing output of a process of assessing chemical materials manifested as an irregular array of signals, the array being a grid of sub-grids of the chemical materials, said system comprising:

a memory storing generated digital data relating to performance of the process (fig. 19A element 1620); and,

a processor (fig. 19A element 1601) for accessing the digital data from said memory and for determining therefrom a level of confidence (column 31, lines 38-42) in the signal characterizing output of the process (column 105, lines 56-67 and column 106, lines 1-8).

Regarding claim 2, Nandabalan discloses the system of claim 1, said processor determining the level of confidence in the signal characterizing output by measuring an area of a respective spot (column 25, lines 1-6 and column 28, lines 46-53).

Regarding claim 3, Nandabalan discloses the system of claim 2, said processor

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determining the level of confidence in the signal characterizing output by comparing the area of a respective spot to an area of a respective signal (column 100, lines 25-39).

Regarding claim 17, Nandabalan discloses the system of claim 1, said processor determining the level of confidence in the signal characterizing output by evaluating a geometric property of the digital data (column 39, lines 1-3).

Regarding claim 18, Nandabalan discloses the system of claim 1, said processor determining the level of confidence in the signal characterizing output by evaluating a global property of the digital data (column 53, lines 39-43).

Claims 19 and 37 are similarly analyzed as claim 1 above.

Claims 20 and 38 are similarly analyzed as claim 2 above.

Claims 21 and 39 are similarly analyzed as claim 3 above.

Claims 35 and 53 are similarly analyzed as claim 17 above.

Claims 36 and 54 are similarly analyzed as claim 18 above.

Regarding claim 55, Nandabalan discloses the system of claim 1, wherein the set of signals represents an output of a process for assessing a set of proteomic and genomic data samples arranged as data points in a pre-determined spatial arrangement such that each data point has an expected position in the pre-determined spatial arrangement (column 9, lines 46-48).

Regarding claim 56, Nandabalan discloses the system of claim 55, wherein the pre-determined spatial arrangement is a grid-type array (column 26, lines 35-37).

Regarding claim 57, Nandabalan discloses the system of claim 56, wherein the grid-type array comprises a multi-level grid (column 25, lines 2-6).

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Regarding claim 58, Nandabalan discloses the system of claim 55, wherein the pre-determined spatial arrangement is a microarray (column 23, lines 41-50).

Regarding claim 59, Nandabalan discloses the system of claim 55, wherein a level of confidence is a position offset level of confidence for the data point determined from the offset between an expected position of a data point and a respective actual position of the data point (column 48, lines 15-30).

Claims 60 and 65 are similarly analyzed as claim 55 above.

Claims 61 and 66 are similarly analyzed as claim 56 above.

Claims 62 and 67 are similarly analyzed as claim 57 above.

Claims 63 and 68 are similarly analyzed as claim 58 above.

Claims 64 and 69 are similarly analyzed as claim 59 above.

Regarding claim 70, Nandabalan discloses the system of claim 1, wherein the level of confidence is a background contamination level of confidence for the data point determined by measuring the background contamination in an image snip surrounding a data point (column 86, lines 58-67 and column 87, lines 1-6).

Claims 71 and 72 are similarly analyzed as claim 70 above.

### **Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4-16, 22-34, 40-52 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nandabalan et al (U S 6,057,101) in view of Schwartz (U S 5,720,928).

Regarding claim 4, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by determining an ellipticity of a respective signal.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by determining an ellipticity of a respective signal (column 25, lines 1-6 and column 28, lines 46-53).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an ellipticity of a respective signal as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved

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system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 5, Nandabalan is silent about the specific details regarding the system of claim 4, said processor determining the level of confidence in the signal characterizing output by determining an orientation of the ellipticity of a respective signal.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by determining an orientation of the ellipticity of a respective signal (see abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an orientation of the ellipticity of a respective signal as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 6, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by determining a degree of deviation of a respective signal from a



circle.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by determining a degree of deviation of a respective signal from a circle (column 16, lines 47-53 and column 25, lines 24-34).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a degree of deviation of a respective signal from a circle as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 7, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by determining an area of contamination in a window around a respective signal that excludes other signals in the array.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by determining an area of contamination in a window around a respective signal that excludes other signals in the array (column 76, lines 42-46).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an area of contamination in a window around a respective signal that excludes other signals in the array as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 8, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by comparing an intensity for a respective signal with an intensity for contamination in a window around the respective signal that excludes other signals in the array.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses processor determining the level of confidence in the signal characterizing output by comparing intensity for a respective signal with an intensity for contamination in a window around the respective signal that excludes other signals in the array (column 25, lines 13-18).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use comparing an intensity for a respective signal with an intensity for contamination in a window around the respective signal that excludes other signals in the array as taught by Schwartz in the system of Nandabalan because

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Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 9, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by determining a level of alignment between the sub-grids.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by determining a level of alignment between the sub-grids (column 18, lines 1-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use determining a level of alignment between the sub-grids as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 10, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the

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measurement of the signal by determining a level of uniformity in distance between the sub-grids.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the measurement of the signal by determining a level of uniformity in distance between the sub-grids (column 82, lines 8-10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use determining a level of uniformity in distance between the sub-grids as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 11, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by determining a number of missing sub-grids in the array.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by determining a number of missing sub-grids in the array (column 37, lines 21-23).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a number of missing sub-grids in the array as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 12, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by measuring a degree of parallelism of rows and of columns of each sub-grid.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by measuring a degree of parallelism of rows and of columns of each sub-grid (column 23, lines 46-50 and lines 62-65).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use measuring a degree of parallelism of rows and of columns of each sub-grid as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological

function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 13, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by measuring a degree of orthogonality between rows and columns of each sub-grid.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by measuring a degree of orthogonality between rows and columns of each sub-grid (column 11, lines 62-67).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use measuring a degree of orthogonality between rows and columns of each sub-grid as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 14, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by measuring a background variation in a window around a respective signal that excludes other signals in the array.

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In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by measuring a background variation in a window around a respective signal that excludes other signals in the array (column 27, lines 8-15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use measuring a background variation as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 15, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by evaluating a degree of deviation between a center location of a respective spot and a point in the grid associated with the respective spot.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by evaluating a degree of deviation between a center location of a respective spot and a point in the grid associated with the respective spot (column 25, lines 24-34).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use evaluating a degree of deviation between a center location of a respective spot as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Regarding claim 16, Nandabalan is silent about the specific details regarding the system of claim 1, said processor determining the level of confidence in the signal characterizing output by measuring a degree of background variation in the array. In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises processor determining the level of confidence in the signal characterizing output by measuring a degree of background variation in the array (column 27, lines 8-15). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use measuring a background variation as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.



Claims 22 and 40 are similarly analyzed as claim 4 above.

Claims 23 and 41 are similarly analyzed as claim 5 above.

Claims 24 and 42 are similarly analyzed as claim 6 above.

Claims 25 and 43 are similarly analyzed as claim 7 above.

Claims 26 and 44 are similarly analyzed as claim 8 above.

Claims 27 and 45 are similarly analyzed as claim 9 above.

Claims 28 and 46 are similarly analyzed as claim 10 above.

Claims 29 and 47 are similarly analyzed as claim 11 above.

Claims 30 and 48 are similarly analyzed as claim 12 above.

Claims 31 and 49 are similarly analyzed as claim 13 above.

Claims 32 and 50 are similarly analyzed as claim 14 above.

Claims 33 and 51 are similarly analyzed as claim 15 above.

Claims 34 and 52 are similarly analyzed as claim 16 above.

Regarding claim 73, Nandabalan is silent about the specific details regarding the system of claim 1, wherein each data point is represented by at least one pixel, with the pixels of the data point representing a subset of the pixels contained in an image snip, and where the level of confidence is an ignored pixel percentage level of confidence for the data point determined based on the percentage of the pixels in the snip representing the data point.

In the same field of endeavor (molecular biology and microbiology), however, Schwartz discloses image processing and analysis of individual nucleic acid molecules comprises each data point is represented by at least one pixel, with the pixels of the data point

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representing a subset of the pixels contained in an image snip, and where the level of confidence is an ignored pixel percentage level of confidence for the data point determined based on the percentage of the pixels in the snip representing the data point (column 17, lines 66-67; column 18, lines 1-4 and 31-38).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use as taught by Schwartz in the system of Nandabalan because Schwartz provides Nandabalan an improved system based on the development of techniques, including high throughput techniques, which reproducibly and rapidly generate populations of individual, elongated nucleic acid molecules that not retain biological function but are accessible to manipulation and make possible rapid genome analysis.

Claims 74 and 75 are similarly analyzed as claim 73 above.

#### **Other Prior Art**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Friend et al (U S 6,203,987 B1) disclose method for using co-regulated genesets to enhance detection and classification of gene expression patterns.

Nadabalan et al (U S 6,083,693) disclose identification and compression of protein-protein interactions that occur in populations.

Stoughton et al (U S 6,351,712 B1) discloses statistical combining of cell expression profiles.

#### **Contact Information**

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8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (571) 272-7458.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mehta Bhavesh M, can be reached at (571) 272-7453. The fax phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Group Art Unit 2625

August 15, 2005

*A-Tabatabai*

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PRIMARY EXAMINER